

FIG.1

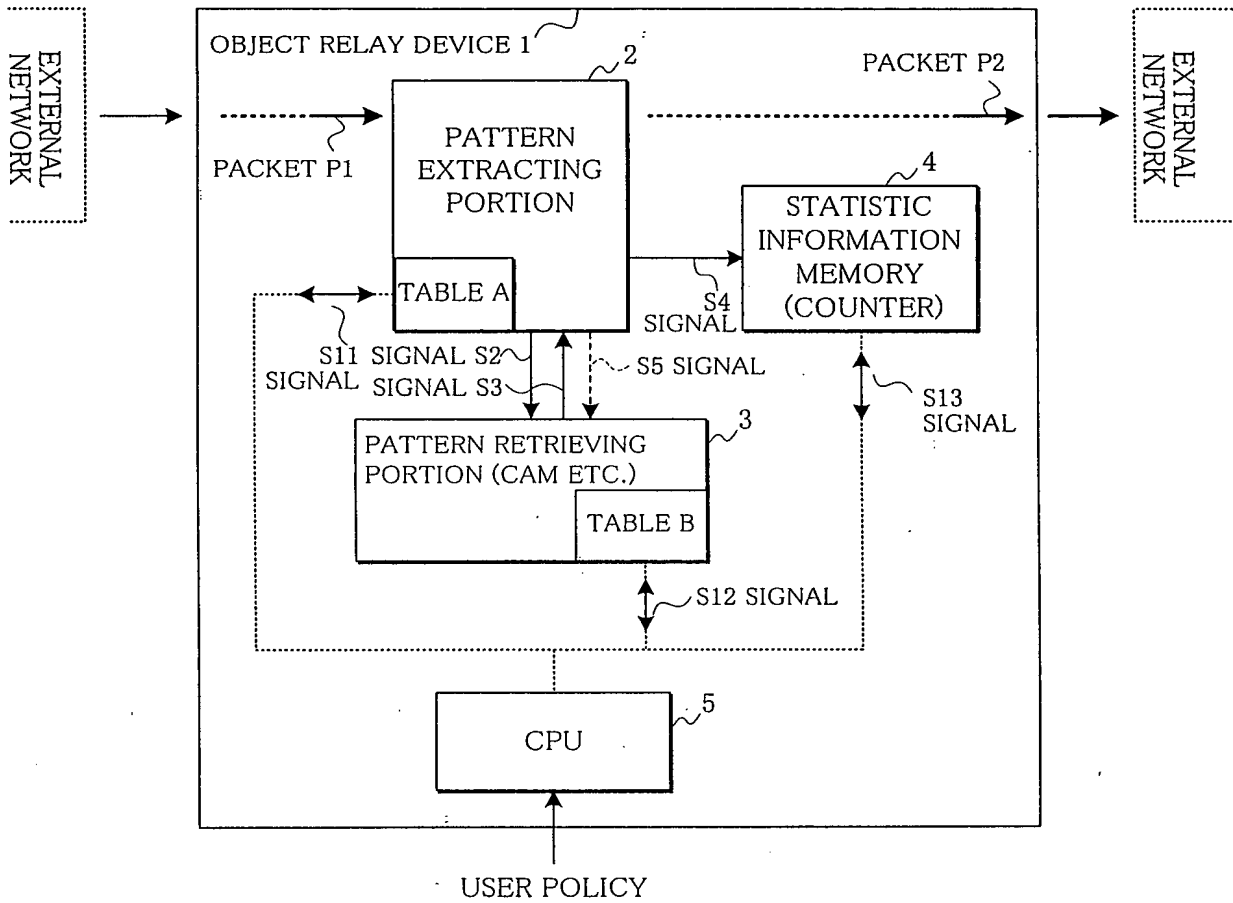


FIG.2

TABLE A (TABLE FOR REFLECTING USER POLICY TO PATTERN EXTRACTION)					
ENT	PACKET TYPE	ERROR TYPE	PATTERN EXTRACTION POSITION ( (OFFSET 1, LENGTH 1), (OFFSET 2, LENGTH 2),... )	STATISTIC INFORMATION BASE ADDRESS	LEARNING FLAG
0					
1 (EX.1)	{ 0, 0800, 6 }	0 (ABSENCE)	{ (208, 32), (288, 16) }	80000000	0 (ABSENCE)
1 (EX.2)	{ 1, 0800, 6 }	1 (PRESENCE)	{ (116, 12), (240, 32), (320,16) }	80000000	1 (PRESENCE)
0					
※PACKET TYPE EXAMPLE: { (PRESENCE/ABSENCE OF TAG: 0 ABSENCE, 1 PRESENCE), (TYPE VALUE: 0x0800 (IP)), (PROTOCOL VALUE: 6 (TCP)) }					

FIG.3A

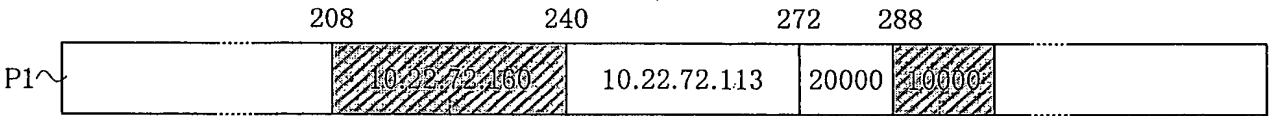


FIG.3B

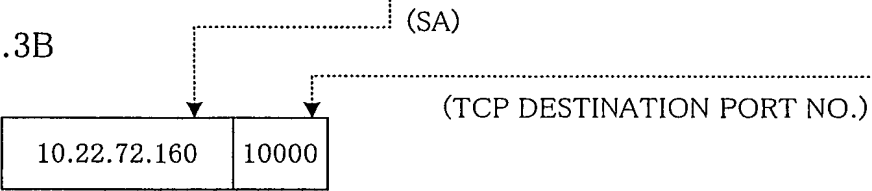


FIG.4A

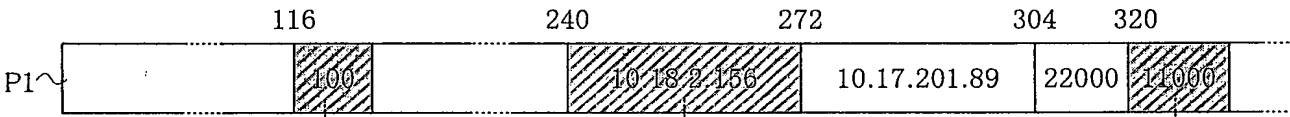


FIG.4B

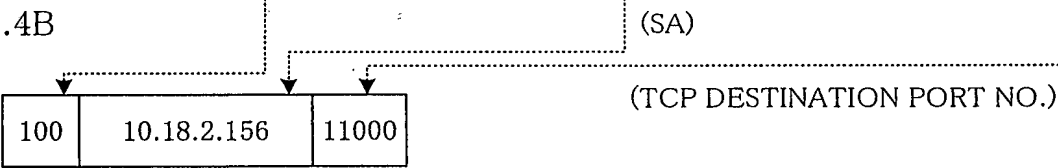


FIG.5

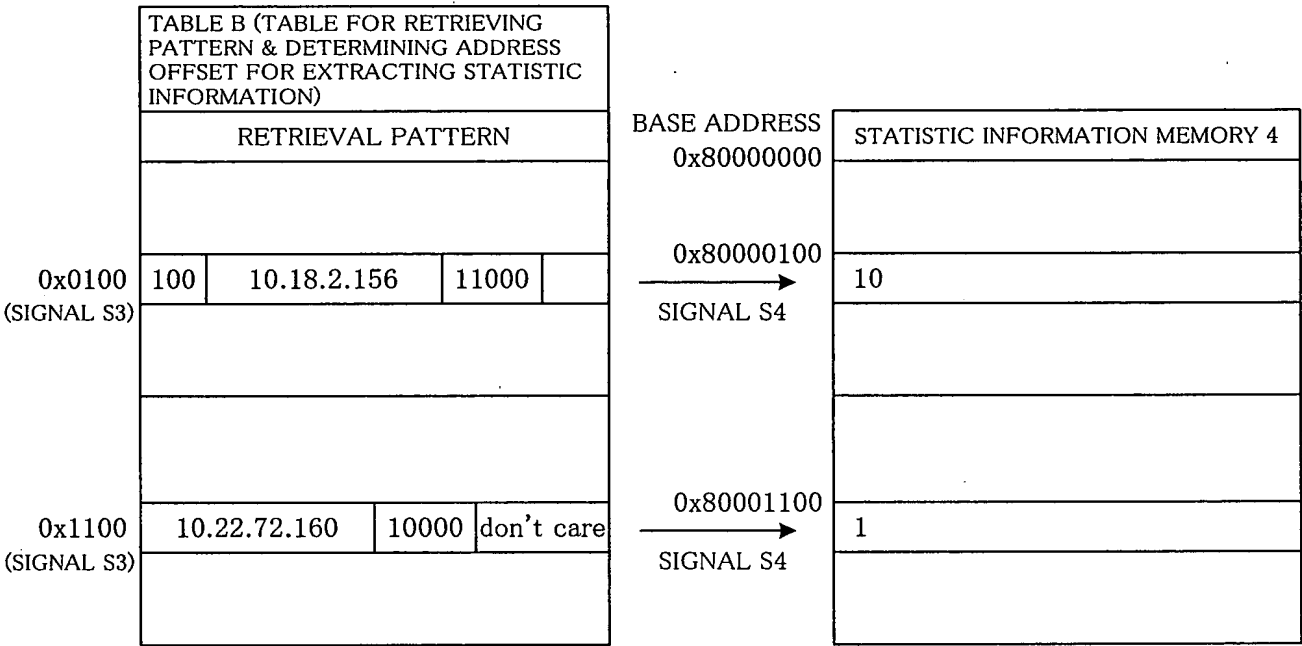


FIG.6A

PATTERN	TABLE A -1	
	{ PATTERN EXTRACTION POSITION (OFFSET 1, LENGTH 1), (OFFSET 2, LENGTH 2), ...}	
(α)	{ (96, 16), (176, 8), (184, 8) }	
(β)	{ (96, 16), (128, 16), (208, 8), (216, 8) }	
	⋮	

FIG.6B

TABLE A -2			
ADDRESS	STATISTIC INFORMATION BASE ADDRESS	LEARNING FLAG	PATTERN EXTRACTION POSITION {(OFFSET 1, LENGTH 1), (OFFSET 2, LENGTH 2),...}
0x0008 0x0009 0x000a	80000000	1 (PRESENCE)	{ (116, 12), (240, 32), (320, 16) }
	80000000	0 (ABSENCE)	{ (208, 32), (288, 16) }

FIG.7

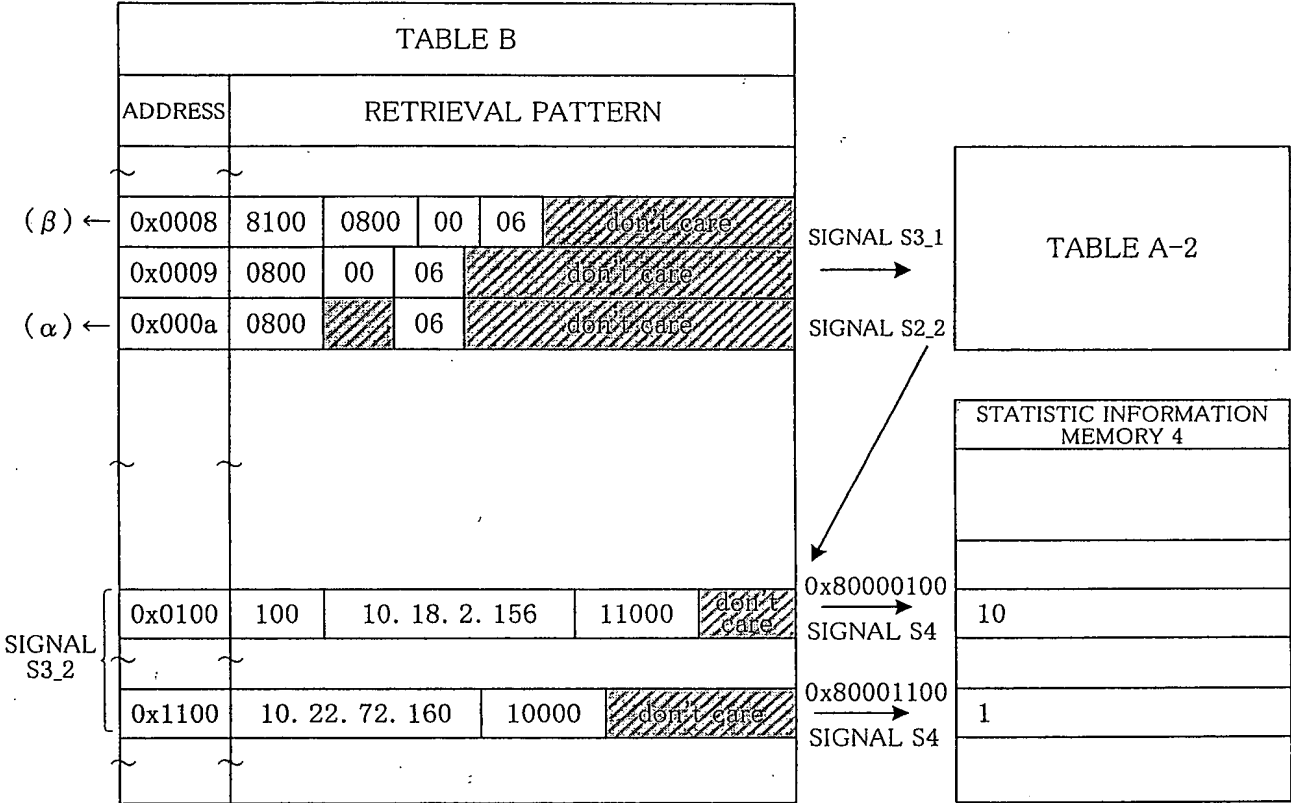


FIG.8

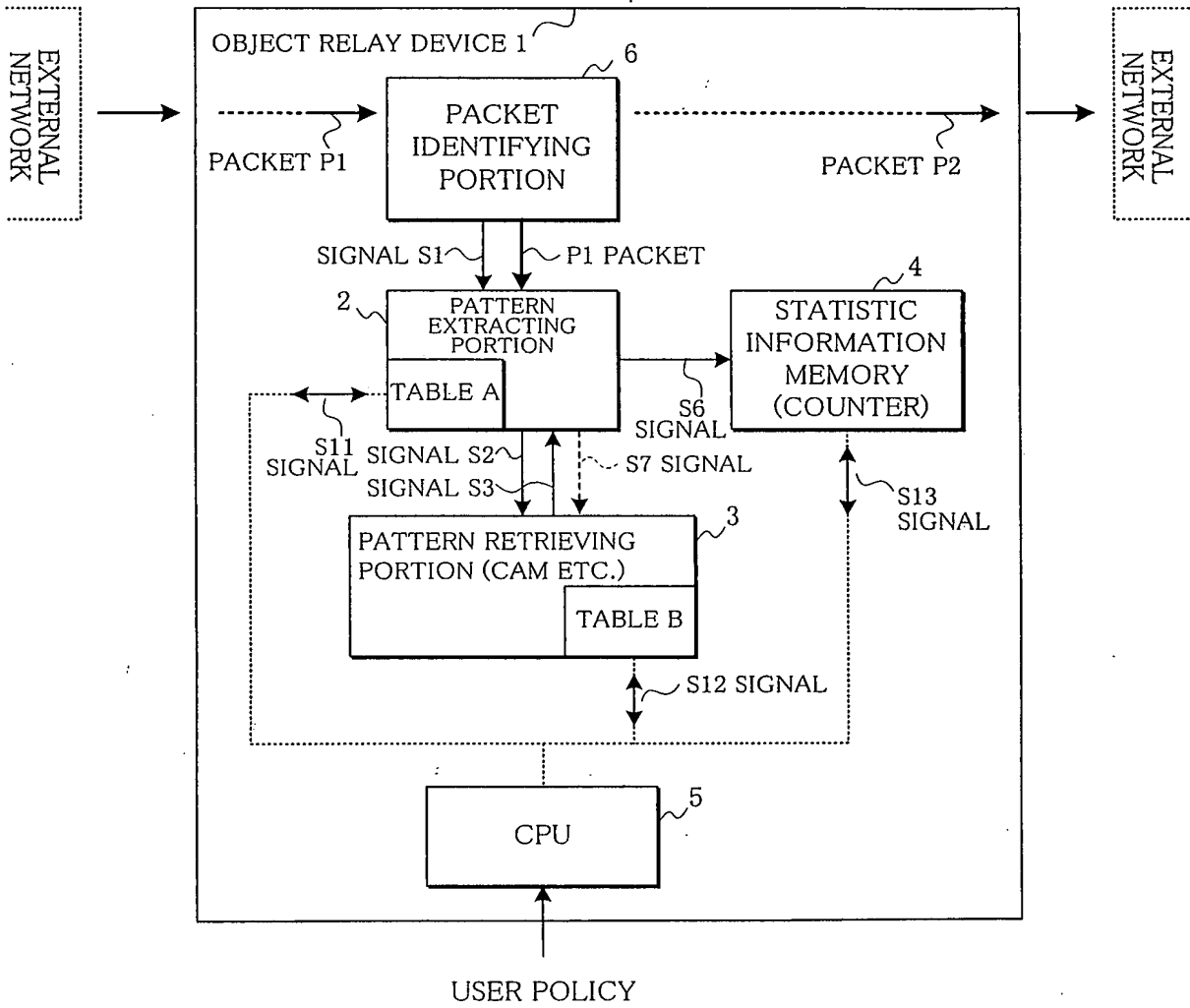


FIG.9

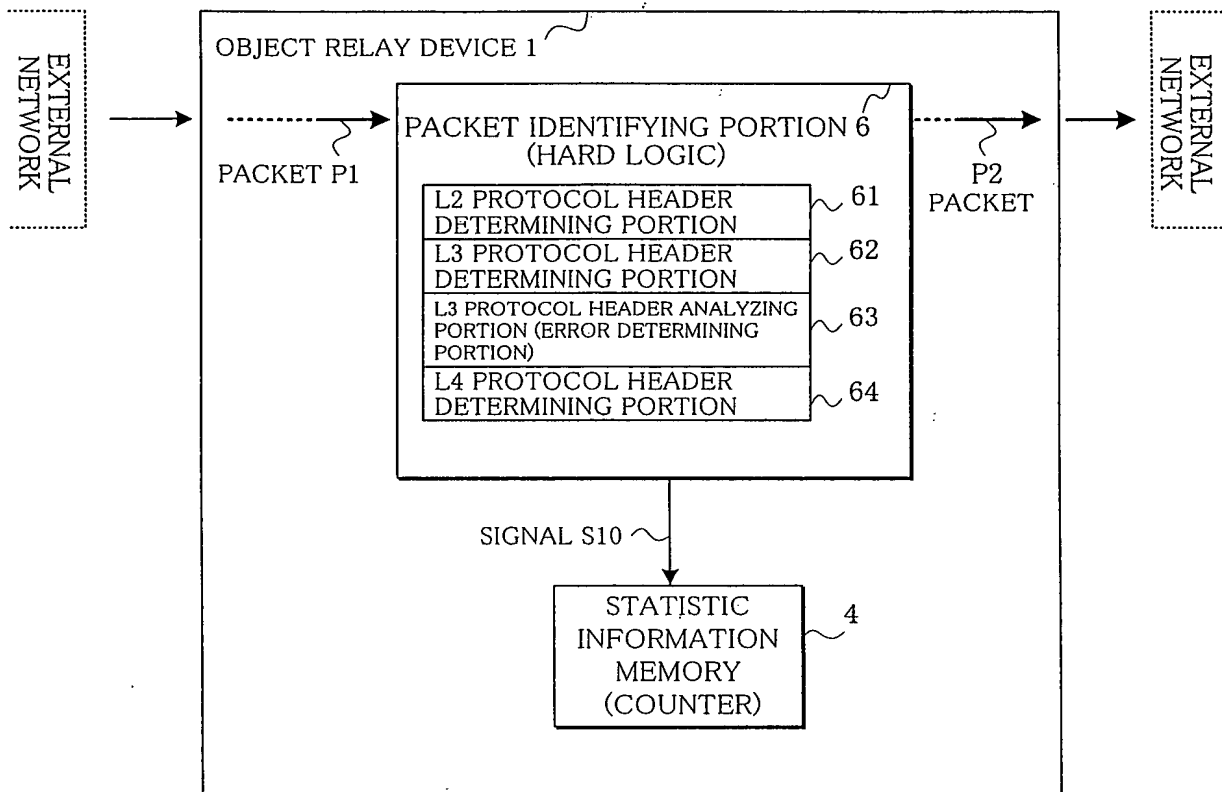


FIG.10A

63	56	55	48	47	40	39	32	31	24	23	16	15	8	7	0	
MAC DESTINATION ADDRESS												MAC SOURCE ADDRESS [47:32]				
MAC SOURCE ADDRESS [31:0]								FRAME TYPE/FRAME LENGTH				Ver	HEADER LENGTH	TOS		
TOTAL LENGTH			ID				FRAGMENT				TTL		PROTOCOL			
CHECKSUM			IP SOURCE ADDRESS								IP DESTINATION ADDRESS [31:16]					
IP DESTINATION ADDRESS [15:0]			SOURCE PORT NO.				DESTINATION PORT NO.				SEQUENCE NO.					
SEQUENCE NO.			ACKNOWLEDGEMENT NO.								OFFSET	RESERVED	URG	ACK	FIN	SYN
WINDOW			CHECKSUM				URGENT POINTER									

FIG. 10B.

63	56	55	48	47	40	39	32	31	24	23	16	15	8	7	0
MAC DESTINATION ADDRESS												MAC SOURCE ADDRESS [47:32]			
MAC SOURCE ADDRESS [31:0]								TAG IDENTIFIER [0x8:00]				PRI		VID	
FRAME TYPE/FRAME LENGTH			Ver	HEADER LENGTH	TOS		TOTAL LENGTH					ID			
FRAGMENT			TTL		PROTOCOL		CHECKSUM					IP SOURCE ADDRESS [31:16]			
IP SOURCE ADDRESS [15:0]			IP DESTINATION ADDRESS								SOURCE PORT NO.				
DESTINATION PORT NO.			SEQUENCE NO.								ACKNOWLEDGEMENT NO.				
ACKNOWLEDGEMENT NO.			OFFSET	RESERVED	SEC	ACK	FIN	RST	SYN	WINDOW			CHECKSUM		
URGENT POINTER															

FIG.10C

63	56	55	48	47	40	39	32	31	24	23	16	15	8	7	0
MAC DESTINATION ADDRESS												MAC SOURCE ADDRESS [47:32]			
MAC SOURCE ADDRESS [31:0]								FRAME TYPE/FRAME LENGTH				Ver	HEADER LENGTH	TOS	
TOTAL LENGTH				ID				FRAGMENT				TTL		PROTOCOL	
CHECKSUM				IP SOURCE ADDRESS								IP DESTINATION ADDRESS [31:16]			
IP DESTINATION ADDRESS [15:0]				SOURCE PORT NO.				DESTINATION PORT NO.				LENGTH			
CHECKSUM															

FIG.10D

63	56	55	48	47	40	39	32	31	24	23	16	15	8	7	0	
MAC DESTINATION ADDRESS												MAC SOURCE ADDRESS [47:32]				
MAC SOURCE ADDRESS [31:0]								TAG IDENTIFIER [0:8100]				PRI [5]		VID		
FRAME TYPE/FRAME LENGTH			Ver	HEADER LENGTH	TOS		TOTAL LENGTH					ID				
FRAGMENT			TTL		PROTOCOL		CHECKSUM					IP SOURCE ADDRESS [31:16]				
IP SOURCE ADDRESS [15:0]			IP DESTINATION ADDRESS									SOURCE PORT NO.				
DESTINATION PORT NO.			LENGTH					CHECKSUM								